

21 LYSERGIC ACID DIETHYLAMIDE METHODOLOGY	Page 1 of 1
Division of Forensic Science  CONTROLLED SUBSTANCES PROCEDURES MANUAL	Amendment Designator:
	Effective Date: 9-December-2003
<p style="text-align: center;"><b>21 LYSERGIC ACID DIETHYLAMIDE (LSD) METHODOLOGY</b></p> <p><b>21.1 Scheduling:</b> Schedule I – LSD</p> <p><b>21.2 Analog:</b> LAMPA (Lysergic acid methyl propyl amide) is a positional isomer of LSD and is included in Schedule I.</p> <p><b>21.3 Extraction:</b></p> <p>21.3.1 LSD may be dry extracted with Methanol from blotter paper and other matrices.</p> <p>21.3.2 LSD can be extracted from basic aqueous solution with organic solvents.</p> <p>21.3.3 It may be necessary to dissolve the samples in a MeOH/CHCl<sub>3</sub> mixture to extract LSD out of samples like plastic “window panes.”</p> <p>21.3.4 If samples are a matrix which is impervious to organic solvents, LSD may be extracted by creating the tartrate salt, followed by base extraction.</p> <p>21.3.4.1 Procedure (<i>Analysis of Drugs</i> - DEA publication):</p> <ul style="list-style-type: none"> <li>• Soak sample in 1% aqueous tartaric acid solution.</li> <li>• Make basic with sodium bicarbonate powder.</li> <li>• Extract into chloroform for further analysis.</li> </ul> <p><b>21.4 Color Test Results:</b></p> <p>21.4.1 p-DMAB (Ehrlich’s or Van Urk’s) – purple or blue</p> <p><b>21.5 TLC:</b></p> <p>21.5.1 Baths: The TLC8 system is useful to distinguish LSD from LAMPA.</p> <p>21.5.2 Detection Methods</p> <p>21.5.2.1 LSD fluoresces blue under long wave UV light.</p> <p>21.5.2.2 Detection spray - p-DMAB (Ehrlich’s or Van Urk’s), it may be necessary to heat the plate to get good visualization (Blue spot on a white background).</p> <p><b>21.6 UV:</b> Not useful under normal circumstances.</p> <p><b>21.7 GC:</b></p> <p>21.7.1 Very small samples may require reduced split ratio or splitless injection techniques.</p> <p>21.7.2 LSD and LAMPA separate well on GC.</p> <p><b>21.8 FTIR:</b> Not usually possible because of the small quantity of LSD present in samples.</p> <p style="text-align: right;">♦ End</p>	